

Environmental Law at Maryland



University of Maryland School of Law

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WIRED CLASSROOM CONNECTS CAMPUSES

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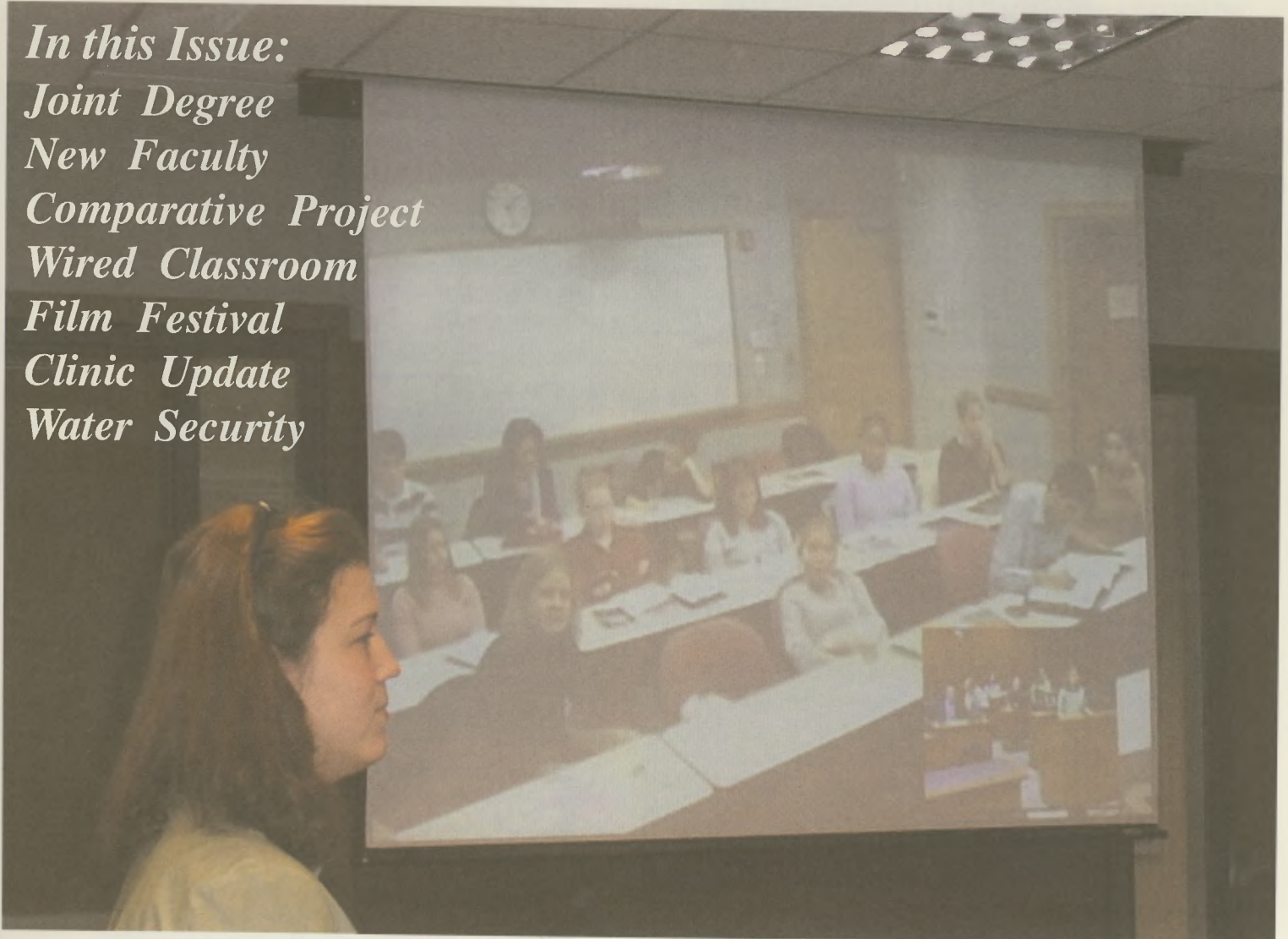
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Law student Jaclyn Ford makes presentation to Joint Comparative Environmental Law & Politics Course in Baltimore and College Park.

Environmental Law and Toxicology Programs to Offer Joint Degree



Professor Rena Steinzor

The University of Maryland Medical and Law Schools will soon offer a joint MS/JD degree combining a J.D. with a concentration in environmental law with a masters in either public health or toxicology. Preliminary plans would allow a student to complete both degrees in four years of full-time education.

The development of the joint degree proposal is part of an interdisciplinary educational effort begun two years ago with a grant from University President David Ramsey. Professor Katherine Squibb, director of the Program in Toxicology that is part of the Department of Epidemiology at the UM Medical School, and Professor Rena Steinzor, director of the Environmental Law Clinic, have developed a series of courses that would combine law and science students.

The first, entitled Regulatory Risk Assessment, is designed to teach the basic scientific principles at stake in assessing risks to human health and the environment in a context informed by legal and policy issues. Increased dependence on risk assessment and risk management should motivate anyone involved in the resolution of environmental disputes to understand the scientific principles that underlie these often complex modes of analysis. The course is not designed to make lay professionals into rough approximations of scientists, but rather to teach them how to listen and to understand what the scientists are telling them. Covered topics include: the nature and scope of chemicals in the environment; assessing chemical releases; chemical

fate and transport; toxicology; epidemiology; ecotoxicology; risk assessment; and the technical aspects of pollution control.

The second course, entitled Critical Issues in Law and Science, will enroll law, science, engineering, and policy students in order to undertake an exploration of the high profile, public policy issues that arise at the intersection of law and science in the regulatory context. The course focuses on environmental problems, but is informed by similar debates in other areas of health and safety regulation. Topics addressed include the ethics of human testing, balanced peer review, the boundaries between policy and science, implications of industry funding of scientific research, and the precautionary principle.

Lastly, Professors Squibb and Steinzor hope to enroll science students in the Environmental Clinic to work side-by-side with student attorneys on the representation of clients in a wide range of arenas, from administrative rulemakings to litigation to the legislative process. They have already undertaken such joint representation in a case challenging EPA's refusal to consult with the Fish and Wildlife Service regarding the effects of atrazine on endangered species in the Chesapeake Bay. That case is now pending in Maryland's federal district court.

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Environmental Law Program.*

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faculty, alumni, students, and friends of
the Environmental Law Program.**

MIRANDA SCHREURS JOINS ENVIRONMENTAL LAW PROGRAM FACULTY

Professor Miranda Schreurs has joined the Environmental Law Program as an Affiliate Associate Professor of Law. Schreurs is an Associate Professor in the Department of Government and Politics at the University of Maryland, College Park. She is a leading expert on comparative environmental politics whose joint appointment reflects the Environmental Law Program's emphasis on multidisciplinary education and international and comparative environmental policy. Professor Schreurs currently is co-teaching a course on Comparative Environmental Law and Politics with Professor Bob Percival and directing the Tamaki Foundation Project on Environmental Equity in Japan, Germany, and the United States (see related articles on pp. 4 & 5 of this newsletter).



Professor Schreurs received her Ph.D. in political science from the University of Michigan in 1996 and her B.A. and M.A. from the University of Washington. She is the author of *Environmental Politics in Japan, Germany, and the United States* (Cambridge: Cambridge University Press, 2002), which is being translated into Japanese for publication by Iwanami Press. Professor Schreurs also is the co-editor of *Ecological Security in Northeast Asia* (Seoul: Yonsei University Press, 1998), and *The Internationalization of Environmental Protection* (Cambridge: Cambridge University Press, 1997).

Schreurs has conducted research in Japan, Germany, and the Netherlands on a Fulbright dissertation Fellowship, a MacArthur Foundation Fellowship in International Peace and Security Affairs, and a National Science Foundation/Science Technology Agency of Japan Fellowship. Prior to starting her teaching career at the University of Maryland, Schreurs spent two years conducting research at the Center for Science and International Affairs at the Kennedy School of Government at Harvard. Schreurs speaks and reads Japanese, German, and Dutch.

JOANNA GOGER JOINS ENVIRONMENTAL LAW PROGRAM FACULTY

Joanna Goger, a Duke University and Maryland Law class of 2000 honors graduate, has joined the Environmental Law Program faculty at Maryland. During the 2003-04 academic year, Joanna is assisting Professor Steinzor with the environment law clinic and she is serving as the coordinator of the Ward, Kershaw Symposium on "Clean Science in Regulation." (see page 22 of this newsletter) In addition to her work at the law school, Joanna is a senior policy analyst for the Center for Progressive Regulation and an adjunct professor at the University of Maryland College Park where she teaches Introduction to Environmental Law. Next spring Joanna will be teaching the Environmental Law Seminar: Biodiversity Protection.

Prior to joining the Environmental Law Program faculty, she worked as a trial attorney in the Environment and Natural Resources Division of the U.S. Department of Justice. Following her graduation, Joanna served as a law clerk to U.S. District Judge Frederic N. Smalkin.



Comparative Environmental Justice Project

Affiliate Professor Miranda Schueurs is directing a comparative environmental justice project involving close to 30 researchers in the United States, Europe, Japan, and China. The project has been funded by a generous grant from the Tamaki Foundation.

The researchers involved with the Tamaki Environment Project believe that insufficient attention has been paid towards the equity and justice dimensions of environmental practices. As Gary Bryner suggests, "Natural resources laws and policies traditionally focus on encouraging development of resources, protecting natural systems, and ensuring the sustainability of resource development. These laws and policies are usually assessed by how well they achieve these resource development and environmental protection goals and how they interact with the economic goals of efficiency and growth. Environmental justice advocates argue that just as important as these environmental and economic goals, however, should be the consequences of natural resources policy decisions for the societal goals of protecting individual rights, promoting justice and fairness, ensuring fair participation, and fostering social equity."

The Tamaki Environment Project uses comparative analysis to examine how environmental laws and institutions as well as broader economic, political, and social forces contribute to, or mitigate social injustices. Environmental decision making is structured in large part by legal and political institutions. Other historical, social, and economic factors also play a strong role in influencing how environmental justice is "framed" or perceived and the ways it is addressed. Cross-national comparison, therefore, provides a means for considering how different institutional structures affect environmental decision making and outcomes. This approach assumes that environmental inequity is not always random, but rather is a product of social and economic structures domestically and internationally.

The Tamaki Environment Project has at its core the concept of "environmental equity." Environmental equity is a concept with multiple dimensions. The Tamaki Environment Project, for example, looks at the how different societies address international equity or fairness (such as in relation to climate change). It considers the extent to which nations incorporate concerns about inter-generational equity into their laws and policies. It also considers how much attention countries give to "distributive equity"—who wins and who loses and how costs and benefits associated with pollution and environmental protection are distributed. Finally, the project also considers "participatory equity" and "regulatory equity", that is, who has voice in decision making processes and how fair the regulatory process is. Related concepts to environmental equity include sustainable development, environmental justice, burden sharing, ecological democracy, and ecological modernization.

The main aim of the Tamaki Foundation sponsored project on Environmental Equity is to assess how Japan, Germany/the European Union, the United States, and China understand and incorporate "equity" concerns into their environmental laws and policies. As the largest economies, Japan, Germany/EU, and the US have particularly large impacts (footprints) on the global environment. Their impact is both direct in terms of resources consumed, emissions generated, and natural areas that are degraded, and indirect, in terms of the examples they provide other countries of the world. They also can impact directly environmental conditions in developing countries through their foreign investment and trade activities, official development assistance, and formal and informal cooperative initiatives. China, as a country, with a population over 1.2 billion will also have a major impact on the health of the planet in the coming decades.

Japan, Germany/EU, and the US are all rich democracies, but they pursue environmental protection and development from different political, social, and economic starting points. While policy leaders in all three states express awareness of climate change theories, for example, they view the science of climate change with different levels of concern and have reacted with different policy responses. Of the three, the US, particularly since the 1980s, has taken the boldest steps towards deregulation of its economy. This is beginning to affect environmental policy approaches. There is growing emphasis on the importance of market-based approaches to environmental protection and the use of cost-benefit analysis.

Germany, in contrast, follows more of the social welfare approach to development, maintaining a relatively high degree of governmental involvement in the economy in an effort to redistribute wealth and protect citizens. In the environmental realm, Germany appears to be more receptive of regulatory approaches to induce behavioral change. It is also moving to embrace the precautionary principle.

Japan is caught betwixt these models with some cautious steps towards deregulation, but a continued belief in the need for governmental guidance of industry. In the environmental realm, Japan has been guided by a polluter pays principle as a result of its experiences with Minamata mercury poisoning and other similarly terrible diseases. It is slowly moving to adopt the precautionary principle as well, but with considerable concern about how the US approaches environmental protection.

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COMPARATIVE ENVIRONMENTAL LAW & POLITICS SEMINAR CONNECTS CAMPUSES THROUGH “WIRED CLASSROOMS”



the videoconferencing gives her a sense of transcending boundaries, consistent with the theme of the class. All students appreciate the convenience of not having to travel from one campus to another. When the course was offered in the past, class sessions were held on alternating weeks in Baltimore and College Park, necessitating a lengthy commute for half of the class members each week. Now the students in the seminar can interact with students from another part of the university without leaving their home campus. Still the students realize that direct contact is helpful for getting to know each other.

UMCP students meet law students in joint Comparative Environmental Law & Politics course.

During the spring semester 2004, environmental law students are participating in a new multidisciplinary seminar in Comparative Environmental Law and Politics. The course is being co-taught by Professor Robert Percival of the Law School and Professor Miranda Schreurs of the Department of Government and Politics in College Park. (see related story on p.3) While the course has been offered in the past, what is new about it is how it is being offered. The seminar is being taught simultaneously to nine law students in Baltimore and twelve political science students in College Park, thirty miles away. Using video conferencing technology built into the classrooms in the Nathan Patz Law Center, the law students in Baltimore view the College Park classroom on large screens with built-in cameras and microphones broadcasting everything that is said in each classroom over an Internet2 connection.

Student reactions to the course have been highly positive. Khushi Desai describes it as “really exciting.” She notes that the videoconferencing “has been so interactive that I often feel like we are all together in the same room.” Law student Karen McGullam notes that

Thus, the class held a joint meeting at the law school to enable the students to meet each other in person (see picture above).

The seminar explores the political, economic and cultural influences that shape environmental policy in countries with different legal systems and political traditions. Each student in the seminar was required to select two countries for specialized research that seeks to explain similarities and differences in the countries’ approaches to environmental protection and to explore how these affect the success of environmental policy. The students also are required to write research papers and to make in-class reports on how their countries approach selected environmental policy issues.

Students in the seminar are encouraged to attend environmental conferences during the semester and to report on these events to the class. Two law students and two UMCP students in the class attended the Public Interest Environmental Law Conference at the University of Oregon from March 4-7. Khushi Desai and Laura Moy from UMCP joined Jaclyn Ford (3L) and Brian Pinkham (3L) for the conference. The students taped interviews with selected speakers from the conference and prepared a short film report that they showed to the class.

STUDENT FILMMAKERS HONORED AT ENVIRONMENTAL LAW FILM FESTIVAL

For the past two years students in Professor Percival's Environmental Law class have had an unusual assignment: pick an environmental issue they care about and make a short documentary film about it. Each year students in the class have formed small groups to produce some remarkable films. Professor Percival explains that while the film production exercise is ungraded, students discover that they learn a lot from it. "It challenges students by forcing them to confront the difficulty of translating complicated legal and policy issues into a form the average audience can understand." Among his other objectives are to "give students an opportunity to unleash their creativity" and simply to "make Environmental Law even more fun."

In March the Law School hosted an Environmental Law Film Festival & Awards Ceremony to honor the latest group of student filmmakers. Based on voting by an independent panel of judges, awards were made to films in eight categories. In keeping with the environmental theme, the students whose films won awards were given "golden trees."



Awards for "Best Picture" and "Best Acting" went to "The Permit Zone," a film by Russ Bowman, Lev Guter and Ben Homola. Inspired by the classic series "The Twilight Zone," the film imagined a world in which everyone has to account for the environmental impacts of their daily purchasing, consumption and disposals decisions. When the protagonist reaches the limit of his permitted environmental impact, he must shift to purchasing organic produce and make other changes that eventually allow him to acquire excess impact credits that he can sell to a friend.



The award for "Most Educational Film" was shared by the films "Eutrophication" by Craig Langrall, Jaclyn Ford, Sandra Young and Jennifer Svara and "Perchlorate at Aberdeen" by Karen Cassell Newton and Adam Rosenthal. "Eutrophication," which also won the award for "Best Narration," explored how agricultural runoff affects environmental conditions in the Chesapeake Bay. It included a claymation sequence illustrating how chickens and cows convert food into fertilizer. "Perchlorate at Aberdeen" focused on groundwater pollution near the Aberdeen Proving Grounds. It included scenes from a meeting between concerned citizens and EPA officials and an interview with the mayor of Aberdeen.



The awards for "Best Interviews" and "Best Original Film Footage" went to "Preserving Paradise," a film by Zara Friedman, Ami Grace, Julie Goodwin, Sarah Brull and Jessica Meeder. The film examined the use of environmental easements to preserve farmland from development. The film including interviews with



environmental scientists and activists and Julie Colwin, whose farm was the first in Maryland to take part in the preservation program.

The awards for “Best Use of Humor” and “Best Use of Animation/Special Effects” went to “Lead Muppets,” a film by Mala Malhotra, Jee Kim, and Dan Zeller. The film imagined actor Keanu Reeves launching a crusade to combat lead poisoning in Baltimore by stopping retaliatory evictions of tenants who have their apartments tested for lead paint.

Student in this year’s Environmental Law class received some professional advice in planning their film projects. PBS reporter and Pew International Journalism Fellow Marcia Franklin visited the class and gave the students useful tips on how to make environmental documentaries. Franklin, who works for Idaho Public TV, has won awards as a producer and writer for the documentary series, “Outdoor Idaho.” She has recently returned from Iran where she studied the Iranian environmental movement on her Pew fellowship (see <http://www.clipfile.org/marcia/>).

Other films included: “Hybrid Cars” by Lolly Axley, Matt Fuchs, Cortney Madea, Jonathan May, Jonathan Nwagbaraocha, and Ulka Patel, which filmed students at an auto dealer seeking to purchase a hybrid vehicle; “Preserving Critical Habitat” by Roxanne Fox and William McBride, which examined efforts to protect the endangered Delmarva fox squirrel; “What’s That Smell?: Backyard Baltimore” by Christie Biggs, Brian Pinkham, and Michelle Sullivan, which visited local chemical plants that are the largest polluters in the Baltimore area; “Jets v. Ozone” by Serge Zaytsev, which won a special judge’s award for “Best Use of a Jet-Power School Bus in an Environmental Law Film”; “Pigtown” by Erin Appel, Vanassa Douglas, Angela Green, Scott Krygier, and Robert Shilts, which examined community development issues in a Baltimore neighborhood; and “Safe Drinking

Water” by Charles Abney and Barry Bernstein, which compared the results of water quality testing of drinking water, toilet bowl water, and dog bowl water. At the awards ceremony, the student groups who produced films were given DVDs containing the finished films.

While the judges’ awards were given to student films from the 2003 class, films produced by the 2002 Environmental Law class also were recognized. These included: “Fertilizer and the Chesapeake Bay” by Stephen Pyle, Amanda Neidert, Dismas Locario, and Katherine Eller; “Environmentally Challenged” by Kelly Pfeifer, George Faraday, Dan Fruchter, Ray Schlee, Gregg Moser, and Tom Backus; “Chesapeake Bay Dredging” by Danielle Moon and Brian Palmer; “News Hour with Katie Meadows” by Ryane Bellarin, Gregory Schwab, and Tom Riggs; “The Kyoto Rap” by Adrian Curtis, Clare McCown and Michael Winschel; “Arsenic: How Safe Are We?” by John Dowling and Michael Schollaert; “The Environment for Dummies” by Alison Prost, Penny Pechulis, and Karen McGullam; “WUMD (CERCLA)” by Stephanie Brumfitt, Paul Sorisio, Mary Kelley, Alicia Hudson; “Jimmy Smith: CERCLA Victim” by Tim Lake and Richard Mattick.



Students attending the Film Festival & Awards Ceremony watched highlights from the student films. Some first year students in the audience already are making plans for next fall’s film projects.

The Environmental Law Program wishes to express its appreciation to Marcia Franklin and our panel of judges: Associate Dean Jose Bahamonde-Gonzalez, Managing Director of Clinical Law Programs Teresa LaMaster, and faculty members Michael Pinard and Kathleen Dachille.

Bad Water, Endangered Critters, Empty Lots, and Secrecy Unveiled: The Clinic Round-up for 2003-2004

by Rena Steinzor, Director, Environmental Law Clinic

Bad Water

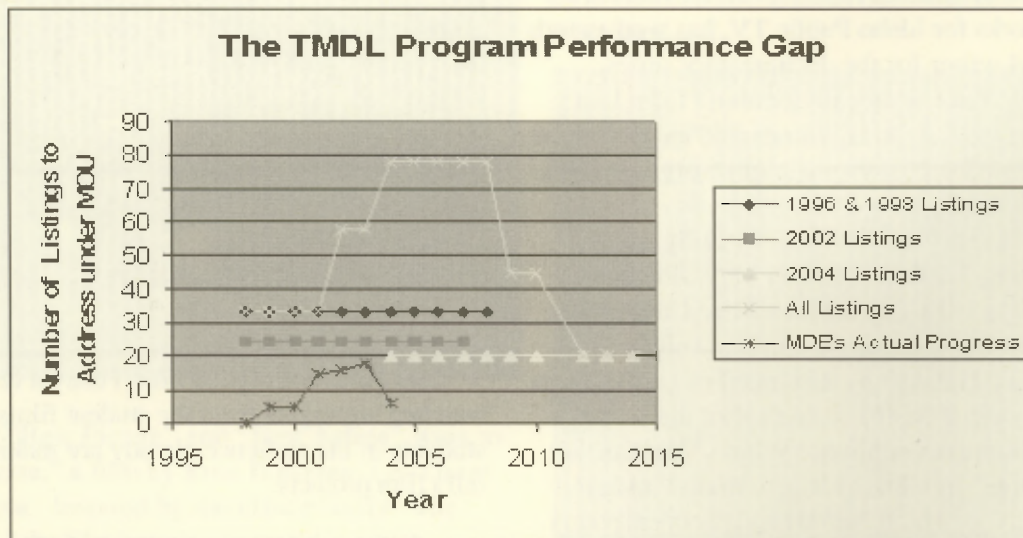
Maryland's efforts to control pollution in some 408 impaired waters throughout the state are crippled by resource shortfalls and a lack of political will to the point that it could take until 2056 to set the standards necessary to even begin cleanup at all such locations. This stark conclusion was the result of a comprehensive analysis of the Maryland Department of the Environment (MDE)'s disjointed efforts to implement the Total Maximum Daily Load (TMDL) requirements of the Clean Water Act, conducted on behalf of the Potomac Riverkeeper and transmitted as the bottom line of comments on an MDE proposal to further extend the deadlines for such standard-setting.

The comments called on Governor Robert Ehrlich to give this failing program the resources it needs to meet the law's mandates, noting that the state had escaped a court order mandating compliance with the statute's requirements only because it had made promises in a Memorandum of Understanding with EPA that it had never kept.

TMDLs are the "safety net" of the Clean Water Act, requiring the states to establish Total Maximum Daily Loads (TMDLs) for water bodies that are so polluted they cannot be used for their "designated uses": drinking, swimming, fishing, or boating. These requirements are triggered when pollution controls at individual industrial facilities have not been enough to protect receiving waters because cumulative pollution from all those facilities have destroyed water quality. Once MDE decides how much to clean up polluted waters, dischargers are compelled to reduce pollutants to manageable levels.

Ironically, the states participating in the Chesapeake Bay Commission have pledged to clean up all water bodies impaired by nutrients no later than 2010. Unless MDE dramatically picks up the pace of its efforts to restore water quality, Maryland will not come close to pulling its weight in achieving this goal, which supplanted the failed pledge to reduce nutrients by 40 percent by 2000.

The following figure compares MDE's performance to the challenges that confront it:



Endangered Critters

Tainted water also figures in the Clinic's litigation on behalf of the Natural Resources Defense Council with respect to the impact of atrazine use on endangered species in the Chesapeake Bay, Midwest, and South. The lawsuit challenges EPA's failure to consult with

experts at the Fish and Wildlife Service and the National Marine Fisheries Service regarding the effects of atrazine on such exotic creatures as the fat pocketbook and the dwarf wedge mussel. Consultations are required by the Endangered Species Act every time that use of a pesticide "may affect" endangered species in an adverse way.



U.S. Army Lt. Col. Timothy Cody, opposing counsel in the Clinic's lawsuit regarding secret maps at the Aberdeen Proving Ground, speaks to members of the Maryland Environmental Law Society.

Tens of millions of pounds of atrazine are applied annually, especially to fields of corn, sorghum, and sugar cane. Research by Dr. Tyrone Hayes at the University of California shows that atrazine is an endocrine disrupter for frogs and related species at relatively low levels, triggering a new round of concern about its relatively unrestricted use.

The European Union has banned the application of atrazine. Its major U.S. manufacturer, Syngenta, is already marketing safer alternatives in EU countries, but is fighting tooth and nail against similar restrictions in the U.S. Clinic student attorneys have little doubt that they are the Davids to Syngenta's Goliath, as embodied by a squad of attorneys from D.C.'s prestigious Latham & Watkins. Supervised by Maryland alumna and former Department of Justice attorney Joanna Goger, the team is locked in an epic battle about NRDC's right to take discovery, with defendant EPA and Intervenor Syngenta arguing that the case is limited to the administrative record.

Empty Lots

On behalf of long-standing client state Senator Brian Frosh, the Clinic returned to one of Maryland's most intense environmental policy disputes: whether to grant liability exemptions to developers and responsible parties seeking to clean up abandoned and contaminated property, commonly referred to as "brownfields." At the end of its 2003 session, the General Assembly passed legislation appointing a Taskforce of stakeholders to study the existing law, first enacted in 1997, with an eye toward "improving" the program. Senator Frosh subsequently asked me to be his representative on the Taskforce, renamed a "workgroup," during sessions he could not attend.

The workgroup agreed to disagree on most issues that came before it, leaving a small universe of consensus changes on the table. But when Governor Ehrlich unveiled

his proposal for reforming the program, he included several of these controversial proposals, including one that had never been placed before the workgroup. That proposal would allow a property owner to receive a liability waiver on the basis of a records search and superficial inspection of the property.

Alarmed by the implications of such proposals, Senator Frosh asked the Clinic to help him prepare alternative legislation, which he introduced at the outset of the session. Negotiations ensued, and a deal was struck, that was acceptable to the Governor and General Assembly leaders, including Senator Frosh. Hopefully, MDE will now be free to focus on implementing the program, as opposed to dealing with constant complaints by the business community about it.

Secrecy Unveiled

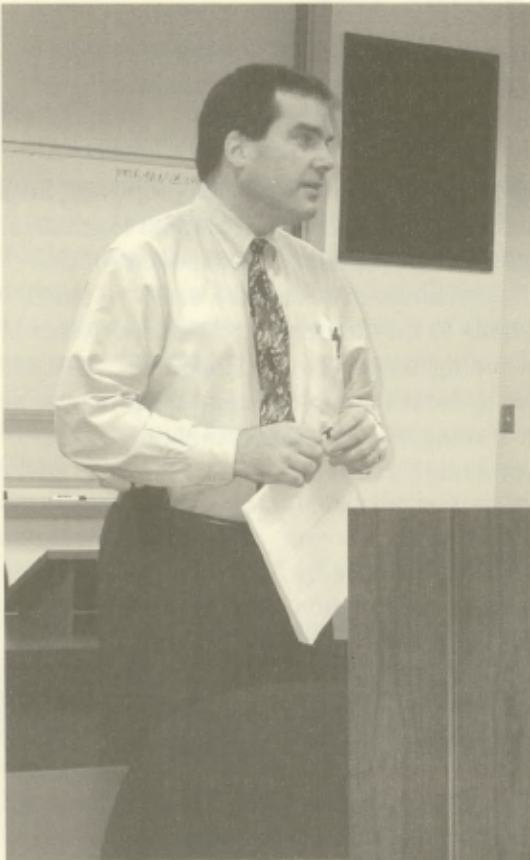
After months of negotiation, the Clinic settled its lawsuit on behalf of the Aberdeen Proving Ground Superfund Citizens Coalition (APGSCC) regarding the censorship of maps showing environmental contamination at the 79,000 acre base, used for 70 years to test weapons.

The lawsuit alleged that the Army failed to disclose critical details on maps that indicated where environmental testing had been conducted at APG, in violation of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Members of the APGSCC use the Army's maps to track and monitor the progress of environmental cleanup at APG. Ironically, some details deleted from the Army's maps, including street names and fence lines at APG, were readily available to the public on the popular web search engine MapQuest or on road maps sold at the local gas station.

The settlement agreement between APGSCC and the Army represents a major victory in the fight for openness in government. The settlement, which covers the preparation of maps at all stages of cleanup, requires the Army to include map details like street names, fence lines, monitoring wells, building footprints, institutional controls, hazardous waste storage buildings, and sewage outfalls. However, the Army may redact fence lines and other structures used as security measures. The Army has also agreed to make maps available at Restoration Advisory Board (RAB) meetings to RAB members, APGSCC members, and the general public.

In exchange, APGSCC agreed, on behalf of its members, not to disseminate the maps on the Internet. APGSCC is a group of Harford County residents committed to monitoring environmental cleanup at APG.

ENVIRONMENTAL LAW SPEAKER SERIES



Chris Schmitt

Chris Schmitt author of "Keeping Secrets: The Bush Administration Is Doing Business Out of the Public's Eye, Here's How and Why," in the *U.S. News & World Report*, tells the story of the first extensive investigative report on a trend toward secrecy that has gripped the government since the tragedies that began on 9/11. He talked to dozens of people, and interviewed citizens directly affected by these policies, including citizens represented by the University of Maryland Environmental Law Clinic. To read about this clinic case, please see page 9 of this newsletter.



Patricio Leyton and MELS Board Member, Paige Poehmann, 3D

Patricio Leyton, one of Chile's top environmental lawyers who teaches environmental law at the University of Chile, visited the law school in November as part of our continued collaboration with South America's first environmental law clinic. Professor Leyton made a presentation to a faculty/student lunch on developments in environmental law in Chile.



Eric Glitzenstein

Eric Glitzenstein with the public interest law firm of Meyer and Glitzenstein, spoke to the Maryland Environmental Law Society (MELS) at their annual fall dinner. Glitzenstein discussed how to establish and maintain a successful public interest environmental law practice.

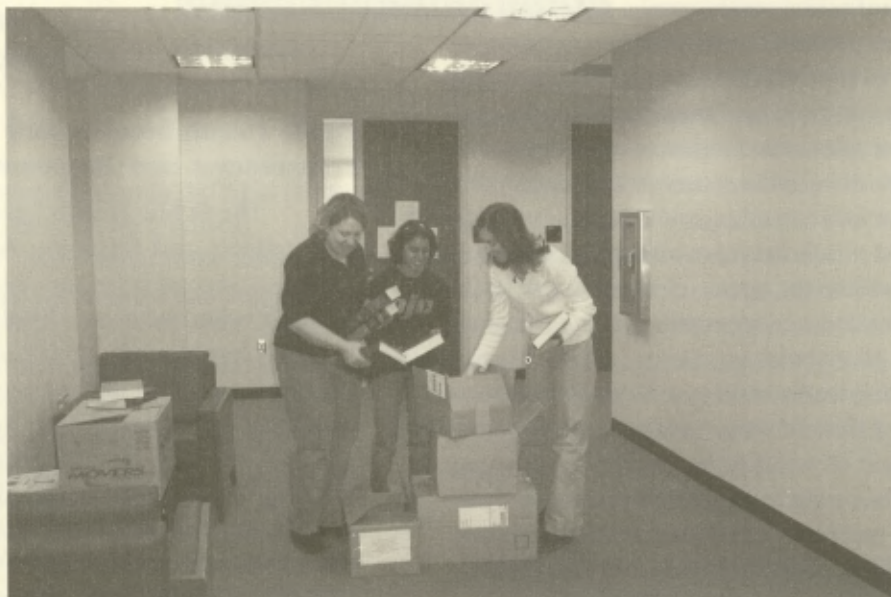
VISIT BY AFRICAN ENVIRONMENTAL LAW SCHOLAR SPURS BOOK DONATION PROJECT



Front Row - Professor Robert Percival, Director, UM Environmental Law Program, Alhagi Marong, Co-Director, ELI Africa Program, Professor Charles Odidi Okidi, University of Nairobi, and Scott Schang, Director of ELI Africa Program. Back Row - environmental law students.

Professor Charles Odidi Okidi of the University of Nairobi Institute for Development Studies visited the Law School during fall 2003 to discuss collaboration with our program and to speak with our environmental students. Professor Okidi, who is one of the top environmental law scholars and educators in Africa, was in the U.S. to serve as the Environmental Law Institute's first J. William Futrell Visiting Scholar. During his visit to ELI in the fall, he worked with ELI attorneys to develop plans to create environmental law and policy centers at African universities, beginning with the University of Nairobi. In addition, he is helping develop the Institute's program to strengthen environmental law and policy programs at African universities by identifying the specific needs for improving curricula, infrastructure, and coordination among their researchers.

During Professor Okidi's talk to our students, he mentioned his university's need for additional law books. Inspired by his talk, the students decided to launch a book drive. Within two weeks the students had collected 12 boxes of law books that they delivered to ELI for shipment to Africa. Four years ago Maryland students shipped a substantial quantity of law books to law schools in five African countries through the ABA's African Law Initiative.



Kelly Pfeifer, 3D, Ulka Patel, 2D, and Ami Grace, 2D, pack books to send to Africa.

How Secure is Maryland's Drinking Water Supply?

by Karyn S. Bergmann, P.G., J.D.*

Since fall 2001, the media has focused on the possibility of terrorist attack via airborne biological, radiological and chemical agents. While this attention has not been inappropriate, there are other significant vulnerabilities to the public health, such as contamination of the public water supply. How vulnerable are public drinking water supplies to attack by terrorists? We have only started to examine this question, although intentional contamination of water supplies has been a concern for decades. As early as 1941, the Director of the Federal Bureau of Investigation, J. Edgar Hoover, recognized the vulnerability of the Nation's water supplies to attack: "among the public utilities, water supply facilities offer a particularly vulnerable point of attack to the foreign agent, due to the strategic position they occupy in keeping the wheels of industry turning and in preserving the health and morale of the American Populace." Recognizing this threat among others, the United States Congress enacted the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 in June 2002.¹

How Viable is the Threat?

A water supply system can be attacked either through contamination of the water with toxic chemicals or biological pathogens or through physical destruction of the water distribution infrastructure. Both of these threats are viable, but their effectiveness in inflicting widespread illness, and hence, probability of being employed by terrorists, depends greatly upon when and where they occur in the water supply and treatment scheme. For example, introduction of chemical or biological agents into a small reservoir containing three million gallons or into an underground aquifer would have little effect. First of all, the mere volume of water in the reservoir would dilute the agent. Second, water in both surface reservoirs and underground aquifers remains in those bodies for years before it moves into the distribution system. In surface water bodies, a water molecule will spend an average time of three years. In a groundwater aquifer, movement of water is much slower and depends on the geology, but even in a rapid groundwater flow regime, a water molecule can spend several decades underground. Third, natural forces, such as sunlight, currents and temperature, would catalyze chemical

changes that might reduce, if not eliminate, the contaminant's potency. Last, many agents that do make it to the distribution system would likely be destroyed by the treatment process, even if some waterborne pathogens are resistant to disinfection by chlorination or removal by filtration.

A more effective strategy for contaminating a public water supply would be to add the agent directly to the distribution system coming from the water treatment plant. Access points could be fire hydrants and taps in buildings. In this manner, contaminants would be concentrated and quickly delivered to their targets. An example of the workability of this tactic is an incident in Charlotte, NC in 2000. A fire truck accidentally released more than sixty gallons of fire suppressant chemicals into a water distribution system by hooking up

to a fire hydrant that did not have a backflow prevention device.

Another effective method for attacking the public water supply would be to physically destroy the water supply infrastructure.

Destruction of a water treatment plant, for instance, could deprive potentially thousands of citizens of drinking water for weeks.

Moreover, most treatment plants contain poisonous chlorine gas for disinfection, the release of which could pose a major health threat. Even a cyber attack on a water system's computer controls could cause a serious disruption to the water supply.



Public Health Security and Bioterrorism Preparedness and Response Act of 2002

The Public Health Security and Bioterrorism Preparedness and Response Act (hereinafter "the Act") addresses several problems, not the least of which is drinking water security. Divided into five titles, the Act provides for research on national preparedness for bioterrorist attacks; enhances controls on dangerous biological agents and toxins; increases protection of the Nation's food and drug supplies; and, finally, provides for drinking water security and safety. Title IV of the Act amends the Safe Drinking Water Act and directs the United States Environmental Protection Agency ("EPA") to implement a vulnerability assessment

program for all community water systems serving populations greater than 3,300 persons. Specifically, the Act requires these community water systems to complete vulnerability assessments by a certain date (see chart below) and to prepare or revise emergency response plans ("ERP") incorporating the results of the vulnerability assessment ("VA") within six months of the VA's completion.

Systems serving population of:	Certify and Submit Vulnerability Assessment (VA) by:	Certify Emergency Response Plan:
100,000 or greater	March 31, 2003	Six months following the completion of the vulnerability assessment (the date the vulnerability assessment and certification were sent to EPA)
50,000 - 99,999	December 31, 2003	
3,301 - 49,999	June 30, 2004	

A VA is an in-depth analysis of a system's critical assets; potential threats to these assets; the probability of these threats; existing countermeasures; and additional countermeasures needed to reduce the chance and impact of identified threats. Section 402 of the Act specifically requires that VAs include a review of "methods and means by which pipes, constructed conveyances, collection, pretreatment, treatment, storage and distribution systems that are utilized in connection with public water systems could be altered or affected so as to be subject to cross-contamination of drinking water supplies." The ERP incorporates a plan for risk reduction as well as for emergency response. Pursuant to the Act, the Department of Homeland Security has promulgated an interim final rule, 69 Fed. Reg. 8,074, that protects VAs submitted to the federal government from public dissemination under the Freedom of Information Act.

The Act is an important step in the right direction. It focuses much needed attention on a critical infrastructure. However, more needs to be done to ensure the integrity of the Nation's drinking water supplies. The first problem is that 84 percent of the 54,000 community water systems across the Nation individually serve less than 3,300 people and thus are not covered by the Act. Although the water systems covered by the Act serve more people, this gap still leaves the water supply for a significant number of citizens unprotected.

The second problem is funding. Many medium-sized community water systems (serving between 3,300 to 10,000) do not have the financial or human resources to conduct a proper vulnerability assessment, much less needed security upgrades identified by such VAs. The Act authorized \$160 million for assisting these water systems to comply with the law, and EPA began awarding grants water utilities serving more than 100,000 people

soon after the Act's passage. However, President Bush rejected the portion for small and medium community water systems in the 2002 Supplemental Appropriations Act for Further Recovery From and Response To Terrorist Attacks on the United States in August 2002. The House of

Representatives passed a bill appropriating \$220 million for such grants in October 2002, but a similar bill failed in the Senate. EPA requested \$16.9 million to assist small to medium water utilities in conducting VAs for fiscal year 2003, which was granted in the Consolidated Appropriations Resolution, Pub. L. 108-7. For fiscal year 2004, EPA requested \$32.5 million to cover water security enhancement efforts. A Senate bill, S. 1039, entitled the Wastewater Treatment Security Act, provides such assistance to smaller water utilities. It was referred to committee in September 2003.

Maryland's Public Water Supply

There are over 3,700 public water systems in Maryland that can be classified as one of three types: community systems; non-transient, non-community systems; and transient, non-community systems. Community systems serve 25 or more year-round residents. Non-transient, non-community systems serve 25 or more individuals each day who regularly use the water system for 6 months per year or more. These include schools or work places that have their own water wells. In contrast, transient, non-community systems serve 25 or more different people daily. These typically include hotels and campgrounds with their own wells. Approximately 72 percent of Maryland's public water systems are transient, non-community systems and are not covered by the Act of 2002.

Maryland does not have statutes or regulations that require security measures for public water supply in addition to the federal law. However, Maryland has taken some measures to encourage community water systems to perform vulnerability assessments. Section 10-618(j) of the State Government Article exempts vulnerability assessments submitted to the state from disclosure under Maryland's Public Information Act. Furthermore, other provisions of the Safe Drinking Water Act require states to develop and implement source water assessment programs to evaluate the safety of all public drinking water systems. Source water assessment is an evaluation of a public drinking water supply source's vulnerability to contamination. Maryland has developed such a program and completed such assessments in 2003. Although these source assessments focus solely upon water supply sources and not upon distribution systems, they do take into account potential threats of intentional contamination of reservoirs or aquifers.

Conclusion

Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 is a good start for protection of one of the Nation's most important infrastructures – water supply. Nevertheless, much needs to be done to provide the maximum level of protection of the public from terrorist threats. One of the key needs is funding and technical assistance for small and medium water utilities, not merely for completion of vulnerability assessments but also for the necessary security upgrades to facilities. Without this kind of support, the Act will become an unfunded mandate that the public will ultimately pay.

¹ Public Health Security and Bioterrorism Preparedness and Response Act, Pub. L. No. 107-188, (codified into the Safe Drinking Water Act, 42 U.S.C. §§ 1433-35 (2002)).

**Ms. Bergmann, '03, is a certified professional geologist and a law fellow in the University of Maryland Center for Health and Homeland Security.*

ALUM WINS SUIT TO STOP ANIMAL WASTE POLLUTION



NRDC lawyer Melanie Shepherdson (Class of 2000)

Animal waste pollution from industrial dairies has been a major source of water quality problems. This pollution may soon be subject to controls as a result of a precedent-setting victory won by alum Melanie Shepherdson (Class of 2000), an attorney with the Natural Resources Defense Council. On March 8, 2004, a Florida court ruled that pollution from dairies with more than 700 mature animals must be regulated under the federal Clean Water Act.

During nearly three years of litigation, Shepherdson argued that Florida's Department of Environmental Protection (DEP) had violated the federal Act by failing to require industrial dairies to obtain pollution control permits. "The agency was protecting the dairy industry, not the environment," Shepherdson argued. Following a trial, the Florida court agreed and ruled that the DEP must immediately require large dairies to obtain Clean Water Act permits. In his ruling, Judge L. Ralph Smith, Jr., described DEP's efforts to rely on voluntary programs to control animal waste as "so inadequate as to closely resemble a delegation of its duties to the industry it is required to regulate." Shepherdson was joined in the lawsuit by the Clean Water Network and three Florida conservation groups: Save Our Suwannee, ManaSota-88, and the Conservation Alliance of St. Lucie County.

**PROTECTING OUR OCEANS:
LEGAL AND POLICY RESPONSES
TO THE
DECLINE OF MARINE ECOSYSTEMS
32ND NATIONAL SPRING CONFERENCE
ON THE ENVIRONMENT**

JUNE 11, 2004

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- The Future of Oceans Governance – congressional action on the reports of the U.S. Oceans Commission and the Pew Oceans Commission, U.S. ratification of the Law of the Sea Convention, and emerging issues including fish farming, bio-prospecting, national security, and trade

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**COMPARATIVE ENVIRONMENTAL JUSTICE
CONTINUED FROM PAGE 4**

China is addressed from two perspectives. First, the project look at China's environmental problems and governance challenges from within, that is, as China perceives them and addresses them. Over the course of the last decade, the Chinese government has become increasingly aware of the seriousness of its own environmental problems and the economic and human costs of that pollution. Because of its huge population and rapid economic growth, China has severe problems with pollution of air, water, and soil and natural resource degradation. For decades, pollution problems were largely ignored in China's quest for development. In the past decade or two, however, this has begun to change. Many new environmental laws have been introduced. There has been tremendous institutional capacity building. There have been important changes to environmental governance structures. Yet, increasingly, the Chinese government, foreign actors, and environmentalists realize that if environmental protection is to be achieved than issues of equity must also be tackled. The project examines China's environmental laws and policies in relation to the multiple dimensions of environmental equity, looking at who has voice in environmental decision making, how environmental bads and goods are distributed, and the extent to which sustainable development is being institutionalized.

Second, the project considers the role being played by the international community, and in particular key donor states (Japan, the US, Germany, and the EU), in relation to the promotion of environmental protection and environmental equity in China. For China, international involvement in environmental protection initiatives is considered both a necessity and an obligation.

The Tamaki Environment Project team is being led by Associate Professor Miranda Schreurs of the University of Maryland College Park's Department of Government and Politics. Professor Robert Percival of the University of Maryland Law School is involved in the US team. In addition to the core support provided by the Tamaki Foundation (Mrs. Meriko Tamaki, President), the Japan Foundation Center for Global Partnership and the German Research Association have supported conferences associated with the project. The Woodrow Wilson Center's China Environment Forum (directed by Jennifer Turner) has been a co-partner in the China component of the project. In Germany, Professor Guenter Heiduk (University of Duisburg-Essen) and Professor Rolf Sprenger (Ifo Institute) have provided key assistance. In Japan, Professor Hiroshi Ohta (Aoyama Gakuin University) provided help with conference organization. Conferences related to the project have been held in Germany, Japan, and the United States.

ALUMNI PROFILE

Maryland Environmental Law grads know that there are many ways to serve the public interest. Jennifer Bushman (class of 2000), who worked on environmental issues in South America while in law school, decided to spend two years after graduation as a Peace Corps volunteer in Bolivia.



Jennifer Bushman with her "brothers and sisters."

*by Jennifer Bushman**

In thinking about what to write in an article for the environmental law newsletter, I can think of nothing pressing, neither environmental, nor law related to say. You see, I've been here in Santa Cruz, Bolivia (in the heart of South America) working in small business development as a Peace Corps Volunteer for two years. So forgive me for taking up a page of the newsletter with a completely unrelated topic, kids.

Peace Corps assigned me to work with SOS Children's Villages, an international non-governmental organization dedicated to bringing love, a family, and a supportive community to every child in need. The organization began in Austria in 1949 when the founder, Hermann Gmeiner, decided to help war orphans by finding them houses and giving them substitute moms, thus creating the first SOS Children's Village. Since then the organization has grown all over the world (there are two villages in the US) and expanded into other outreach services such as schools and daycare centers.

I work in the school. It's an elementary and middle school with about 700 1st through 8th graders. I teach all kinds of things including basketball, English, and home economics, but my primary project is to teach small business skills to the older grades. Teaching is challenging. I don't think I'm cut out for it in the long run.

I love working with the students, but I'm just not much of a disciplinarian. But enough of that . . . what I really want to tell you about is the wonderful experience I had living in the children's village.

There were 113 children, living in twelve houses with their substitute SOS moms. I rotated from house to house around the village spending one week with each family; eating meals, cooking, doing laundry, and hanging out. Looking back now, I never expected to learn the names of all of them, let alone, get to know them. But I did, and it still amazes me when I stop and think that I can tell you a few quirks about each one of them.

Like Katherine. She's about eight or nine years old by now. She always was the one who hosted me in her house, told me where to sit at the table, offered me a glass of lemonade, or showed me the family photo albums. She's kind, and clever, and very polite. After we got to be friends, she asked me if I would send her "five things" from the US when I got home. I agreed to send her five things. Over time, she customized her request to ask for chocolate and bubble gum, and three things. Later it became, chocolate, bubble gum, and a backpack, and two things. When we spoke about it a few months later she said she now had another list. I pretended to get mad and told her that I thought I was supposed to go home and pick out special things just for her and here she was just taking all the fun out of it. To date, I'm sending her chocolate, bubble gum, a backpack, a Barbie, and a "surprise".

Or Ariel. A fourteen year old boy, very smart. One of the few males I met that didn't play soccer, which is very rare in Bolivia. (Many times baby's first word is "goal") Ariel wants to be a cook or a baker. One of the first things Ariel said to me was "que quiere decir 'Open House'?" Open house. What a curious expression to know, but later I found out that was the name of one of the local English language schools when he showed me an old pamphlet he saved. He also



Children learning small business development the American way.

showed me an old "People" magazine from the 90's that he treasured. He soon became my giftee of all the old Newsweeks and other magazines I got during my time there. The articles and pictures of the magazines provided us with great topics of conversation, and his house became my regular spot for baking cakes and cookies.

And lastly I'll tell you about Guido. Guido will probably be nine years old soon. He was born partly deaf and mute. Thanks to the former Peace Corps Volunteer in the village, Guido now has hearing aids and is learning to talk. He's in a special school for the disabled. Guido is an amazing kid. He's learned to be very animated and to use a lot of gestures to communicate and to entertain. He can mimic someone's walk or copy dance moves of a music video with incredible accuracy. From time to time, Guido's SOS mom needed someone to accompany Guido on the bus to his school. For a couple of days I helped out. My most memorable moment with Guido was on the bus into town. A young good-looking man got on the bus. As he made his way to the seat beside us he made eye contact with me. Guido caught me smiling and his face lit up. He then put his fingertips of his right hand together and gave them a kiss. Then he pretended to "kiss" my cheek with his fingers, kissed his own fingers again, and then reached over to "kiss" the man sitting next to him. I wanted to kill Guido at the time, but later we had a lot of good laughs over the story.

So there you go. Three kids. And there are 110 more in Santa Cruz, including the house of eight that

and struggling families.

The only thing I can honestly say that the kids take for granted is the love and protection they get from the SOS community. If you would like to learn more about SOS Children's Villages you can visit their website at www.soschildrensvillages.org

****Jennifer Bushman is a law clerk for the Honorable W. Newton Jackson, III, Wicomico County, MD.***

Lonnie Kishiyama has Award-Winning Essay Published

The essay by Lonnie Kishiyama (class of 2004), "Countering Corporate Evasion of Environmental Obligations Through Bankruptcy," which was awarded second place in the 2003 Roscoe Hogan Environmental Essay Competition, has been published in the *Vermont Journal of the Environment*. To read the essay, visit <http://www.vje.org/roscoe/roscoe03.html>.

ALUMNI, STUDENTS, AND FACULTY



Approximately 150 guest attended the winetasting.

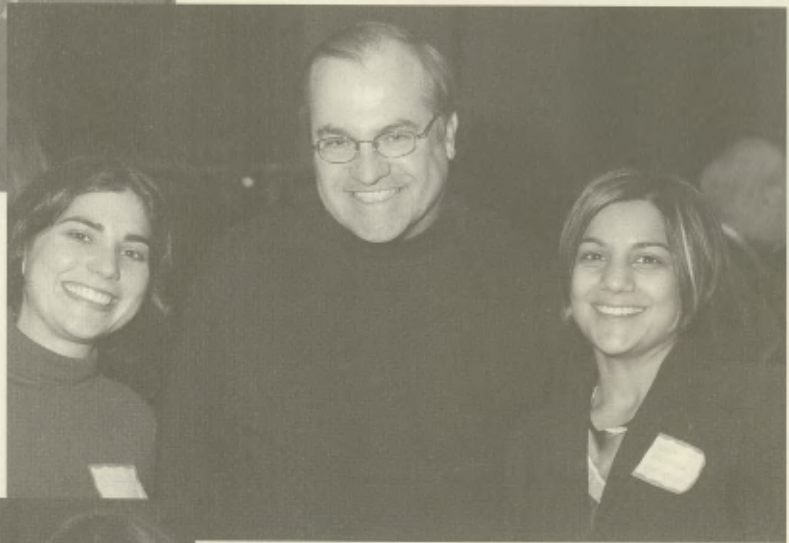


Can you guess the "mystery wine?" Guests are invited to taste the wine, guess the type, country, region, and vintage year. The one that comes closest in each category wins a prize.

ENJOY 12TH ANNUAL WINETASTING



Joe Pellitier, '98, samples the wine with Alison Loughran, '98.



Professor Bob Percival with Jaime Levy and Mala Malhotra, '04.



Liz McFarlane, Director of Development, UM Law School, Tracy Kulikowski, '03 and Sheila Garrity, '03.

Teresa LaMaster, '95, Managing Director of Clinical Law Programs, is handed a glass of wine.





*Jessica Stuart, '02, Matt Steinhilber, '03,
and Professor Rena Steinzor.*

*Jaclyn Ford, '04 and
Terry Harris, '01.*



*Geoffrey Washington, '97 and
Pat Ostronic, '97.*

*Cortney Madea, 05, pours wine
for Shana Jones, 02.*

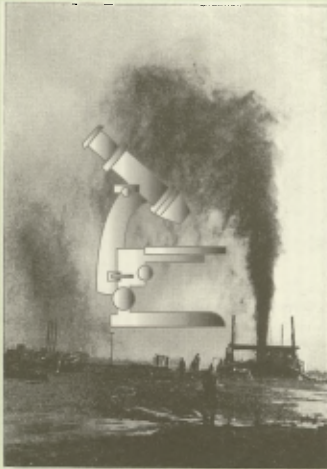


*Guest enjoy wine, light
refreshments, jazz band, and
good company.*

*First year law students,
Katie Wainwright and
Mitch Rothenberg attend
their first winetasting at
Maryland.*



YOU ARE INVITED TO ATTEND
“CLEAN SCIENCE IN REGULATION”



**THE 2004 WARD, KERSHAW
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**HELD IN CONJUNCTION WITH
THE CENTER FOR
PROGRESSIVE REGULATION (CPR)**

FRIDAY, APRIL 16, 2004

UNIVERSITY OF MARYLAND SCHOOL OF LAW

The University of Maryland School of Law is delighted to host this year's Ward, Kershaw Environmental Law Symposium with the Center for Progressive Regulation (CPR). Funded by a grant from the Beldon Fund, CPR's Clean Science in Regulation Project seeks to ensure that state and federal regulatory agencies can rely upon unbiased and reliable scientific information and advice in implementing health, safety, and environmental laws.

This year's Symposium is a direct response to increasing attempts by government officials, interest groups, and regulated industry to use scientific uncertainty as a means of paralyzing the regulatory process. Under the guise of "sound science," these groups have systematically discredited highly regarded research, calling it "junk science," in an effort to roll back public health, environmental, and other protections. In addition, these groups often seek to manipulate or "bend" the science that is generated by placing unjustified restrictions on research, suppressing unfavorable research, harassing scientists, and stacking peer review panels in favor of regulated industry.

To help prevent future exploitation of science and public misunderstanding, the Center for Progressive Regulation has developed a working set of Principles of Clean Science that present an affirmative response to the current manipulation of science in the regulatory arena. These principles represent a framework for ensuring the integrity of science in regulatory decision-making by highlighting the importance of such fundamental concepts as scientific freedom and independence, honesty, transparency, and avoidance of bias and conflicts of interest.

To expand on these vital principles, this year's Symposium is designed as a working meeting of prominent scientists and legal experts who will author a forthcoming book on the Principles of Clean Science. The Symposium will serve as an opportunity for the presentation of ideas and for discussion of the Principles among the authors and the audience. Each panel will discuss a specific clean science principle or principles and will identify ways that legal rules or processes have distorted or violated the principle in particular ways.

SCHEDULE

REGISTRATION AND CONTINENTAL BREAKFAST

8:00 a.m.

INTRODUCTION TO THE PRINCIPLES

Wendy Wagner – CPR/University of Texas School of Law

8:40 a.m.

Session I Moderator: Linda Greer, Natural Resources Defense Council

SCIENTIFIC FREEDOM/SCIENTIFIC INDEPENDENCE

9:00 a.m.

- Donald Hornstein – CPR/University of North Carolina-Chapel Hill School of Law
- Thomas McGarity – CPR/University of Texas School of Law
- Katherine Squibb, Ph.D. — University of Maryland School of Medicine
- David Wirth — CPR/Boston College School of Law

Session II Moderator: Anita Nager, Beldon Fund

SCIENTIFIC TRANSPARENCY/SCIENTIFIC HONESTY

10:30 a.m.

- Jennifer Sass, Ph.D. — Natural Resources Defense Council
- Rena Steinzor – CPR/University of Maryland School of Law
- David Adelman, Ph.D. — University of Arizona School of Law
- Carl Cranor, Ph.D. – University of California, Riverside

LUNCH SPEAKER

12:30 p.m.

Sheldon Krinsky, Ph.D., Tufts University

Session III Moderator: Naomi Seiler, Minority Staff, Committee on Government Reform, U.S. House of Representatives

GOV'T ROLE IN SCIENTIFIC RESEARCH

1:30 p.m.

- John Applegate – CPR/Indiana University School of Law
- Holly Doremus, Ph.D. – CPR/University of California-Davis School of Law
- Lynn Goldman, M.D., M.P.H. – Johns Hopkins Bloomberg School of Public Health

Session IV Moderator: Alden Meyer, Union of Concerned Scientists

PEER REVIEW

3:00 p.m.

- David Michaels, M.P.H., Ph.D. — George Washington University School of Public Health and Health Services
- Sidney Shapiro – CPR/University of Kansas School of Law
- Joanna Goger — University of Maryland School of Law

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From I-95 take route 395 (downtown Baltimore) and exit on to Martin Luther King, Jr. Blvd. Turn right at fourth traffic light onto Baltimore St. Turn left at second traffic light onto Paca St. Go 1/4 block and turn right into the Baltimore Grand Garage. Lexington Market garages and lots are also on Paca St. Parking fees must be paid by participants. The law school is directly across the street from the Grand Garage.

Videotapes:

Videotapes of the Symposium can be purchased for \$35.00. Make checks payable to:

Thurgood Marshall Law Library and send to Thurgood Marshall Library, University of Maryland School of Law, 500 W. Baltimore Steet, Baltimore, MD 21201.